AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) A mobile station ~~as in claim 1~~comprising a memory device for storing an International Mobile Equipment Identity (IMEI) code having at least a six digit hexadecimal Serial Number (SNR) representation, wherein said SNR is used with a hexadecimal check digit calculation procedure so as to insure backwards compatibility with an existing installed base of mobile stations having a Binary Coded Decimal (BCD) SNR representation, wherein the check digit calculating procedure is modified so that hexadecimal digits A, B, C, D, E and F are first converted to decimal digits 10, 11, 12, 13, 14 and 15, respectively, and then computing the check ~~bit~~digit using an original check bit calculation algorithm ~~(Luhn Algorithm)~~.

3. (Currently Amended) A mobile station ~~as in claim 1~~comprising a memory device for storing an International Mobile Equipment Identity (IMEI) code having at least a six digit hexadecimal Serial Number (SNR) representation, wherein said SNR is used with a hexadecimal check digit calculation procedure so as to insure backwards compatibility with an existing installed base of mobile stations having a Binary Coded Decimal (BCD) SNR representation, wherein the check digit calculating procedure uses base 16 for all calculations to derive a base 16 check digit.

4. (Original) A method for use with a mobile station of a type that stores a 14 digit International Mobile Equipment Identity (IMEI) code for generating a Check Digit (CD), comprising steps of:

   executing a preliminary step of encoding the 14 digit (D1, D2, D3, ..., D14) IMEI in a hexadecimal representation;

   then computing the CD by,

   (A) doubling the values of the odd digits (D1, D3, D5, ..., D13) of the IMEI

2

using the hexadecimal number base;

(B) adding together the individual digits of the seven numbers obtained in Step A, and adding this sum to the sum of all of the even labeled digits (D2, D4, D6, ..., D14) of the IMEI using the hexadecimal number base; and

(C) if the number obtained at the end of Step B ends in zero (0), setting the CD to zero (0), else if the number obtained at the end of Step B does not end in zero (0), setting the CD to be the difference between that number subtracted from the next highest hexadecimal number which does end in zero (0).

5. (Original) A method for use by a wireless communication system that includes a network and a plurality of mobile stations that each store a 14 digit International Mobile Equipment Identity (IMEI) code, the method generating a Check Digit (CD) and comprising steps of:

for a first type of mobile stations, executing a preliminary step of encoding the 14 digit (D1, D2, D3, ..., D14) IMEI in a binary coded decimal (BCD) representation;

for a second type of mobile stations, executing a preliminary step of encoding the 14 digit (D1, D2, D3, ..., D14) IMEI in a hexadecimal representation;

then computing the CD in the network, regardless of whether an IMEI is received from the first type of mobile station or from the second type of mobile station, by performing the steps of,

(A) doubling the values of the odd digits (D1, D3, D5, ..., D13) of the IMEI using the hexadecimal number base;

(B) adding together the individual digits of the seven numbers obtained in Step A, and adding this sum to the sum of all of the even labeled digits (D2, D4, D6, ..., D14) of the IMEI using the hexadecimal number base; and

3

(C) if the number obtained at the end of Step B ends in zero (0), setting the CD to zero (0), else if the number obtained at the end of Step B does not end in zero (0), setting the CD to be the difference between that number subtracted from the next highest hexadecimal number which does end in zero (0).

6.(New)   A program of machine-readable instructions, tangibly embodied on an information bearing medium and executable by a digital data processor, to perform actions directed toward generating a Check Digit from an International Mobile Equipment Identity (IMEI) code having at least a six digit hexadecimal Serial Number (SNR) representation, the actions comprising:

converting hexadecimal digits A, B, C, D, E and F to decimal digits 10, 11, 12, 13, 14 and 15, respectively, and

computing a check bit using a Luhn algorithm.

7.(New)   The program of claim 7, wherein the information bearing medium and the digital data processor are disposed within a mobile station.

8.(New)   The program of claim 7, wherein the information bearing medium and the digital data processor are disposed within a network element that is not a mobile station.

9.(New)   A program of machine-readable instructions, tangibly embodied on an information bearing medium and executable by a digital data processor, to perform actions directed toward generating a Check Digit CD from an International Mobile Equipment Identity (IMEI) code having at least a six digit hexadecimal Serial Number (SNR) representation, the actions comprising:

deriving a base 16 check digit with a check digit calculating procedure that uses base 16 for all calculations.

10.(New)   The program of claim 9, wherein the information bearing medium and the digital data processor are disposed within a mobile station.

11.(New)   The program of claim 9, wherein the information bearing medium and the digital data processor are disposed within a network element that is not a mobile station.

4